Roll No.

Total No. of Questions: 11

M.Sc. (BT) (Sem. – 2) ENZYME TECHNOLOGY

Subject Code: MBT-203

M Code: 76247

Date of Examination : 16-12-2022

Time: 3 Hrs.

INSTRUCTIONS TO CANDIDATES:

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

- 1. Write briefly:
 - a) How is enzyme activity assayed?
 - b) What is enzyme engineering?
 - c) What is turn over number of an enzyme?
 - d) Define co-immobilization.
 - e) What is an apoenzyme and holoenzyme?
 - f) What are enzyme sensors? Give examples.
 - g) What is ping-pong mechanism?
 - h) What are multienzymes? Give an example.
 - i) What is the significance of Michaelis-Menten equation?
 - j) How can the formation of ES complex be detected?

Total No. of Pages: 02

Max. Marks: 70

SECTION-B

- 2. How are enzymes classified? Explain.
- 3. Describe the techniques for immobilization of enzymes.
- 4. How is enzyme activity regulated in cells?
- 5. What are inborn errors of metabolism?
- 6. Describe the mechanism of enzyme catalysed reactions with an example of lactate dehydrogenase.
- 7. Describe the application of enzymes in pharmaceutical industries.
- 8. Write a note on enzyme inhibition.

SECTION-C

- 9. Draw an outline on the large scale production of enzymes.
- 10. How can the structure of active site determined? Write a note on structure and properties of enzymes.
- 11. What are the factors affecting activity of enzymes? Explain.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.